DERWENT-ACC-NO: 1997-234062
DERWENT-WEEK: 200169

TITLE: Design method of linear motor - involves forming object curve part in primary magnetic pole iron core between front and rear end sides in movement direction for uniform flux distribution between primary and secondary permanent magnet iron cores

PATENT-ASSIGNEE: MITSUBISHI ELECTRIC CORP[MITQ]

PRIORITY-DATA: 1995JP-0162241 (June 28, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 3220898 B2	October 22, 2001		008	H02K 041/03
JP 09074733 A	March 18, 1997		009	H02K 041/03

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 3220898B2	N/A		
1996JP-0169951			June 28, 1996
JP 3220898B2	Previous Publ.	JP 9074733	
JP 09074733A	N/A		
1996JP-0169951			June 28, 1996

INT-CL_(IPC): H02K041/03

ABSTRACTED-PUB-NO: JP 09074733A
BASIC-ABSTRACT: The design method of a linear motor arranges the magnetic north

(N) and south (S) poles of a secondary side permanent magnet alternately in the movement direction. A pair of N and S poles of the secondary magnet are separated by a distance (L) in the movement direction. A object curve part (9) is formed in the primary magnetic pole iron core (1) between the front end side (7) and the rear end side (8) in the movement direction. Then the flux distribution density, covering the movement direction ends (7,8) of the primary magnetic pole iron core and the secondary permanent magnet, is of a sinusoidal shape.

The length of the movement direction in the primary magnetic pole iron core is equal to A, which is computed by equations A = (n + (1/3) + alpha) x L) and ((n + (5/6) + alpha) x L), where n is a positive integer. The thrust ripple is reduced since the movement direction components Ff and Fb, corresponding to the front and rear ends of the primary magnetic pole iron core, cancel each other.

ADVANTAGE - Reduces thrust ripple. Enables flexible design.

CHOSEN-DRAWING: Dwg.1/14

TITLE-TERMS:
DESIGN METHOD LINEAR MOTOR FORMING OBJECT CURVE PART PRIMARY MAGNETIC POLE IRON CORE FRONT REAR END SIDE MOVEMENT DIRECTION UNIFORM FLUX DISTRIBUTE PRIMARY SECONDARY PERMANENT MAGNET IRON CORE

DERWENT-CLASS: V06 X11

EPI-CODES: V06-M06B; V06-M11; X11-H02; X11-J08;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N1997-193642

DERWENT-ACC-NO: 1993-171696
DERWENT-WEEK: 199321

TITLE: Linear motor - has magnetic tapered cushion blocks attached
respectively to both ends of slider NoAbstract

PATENT-ASSIGNEE: FUJI ELECTRIC MFG CO LTD[FJIE]

PRIORITY-DATA: 1991JP-0255601 (October 3, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 05103457 A	April 23, 1993		003	N/A H02K 041/03

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP05103457A	N/A		
1991JP-0255601		October 3, 1991	

INT-CL (IPC): H02K033/18; H02K041/03
ABSTRACTED-PUB-NO: JP05103457A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/2

TITLE-TERMS:
LINEAR MOTOR MAGNETIC TAPER CUSHION BLOCK ATTACH
RESPECTIVE END SLIDE
NOABSTRACT

DERWENT-CLASS: V06 X11

EPI-CODES: V06-M06B; X11-H02;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N1993-131961

CLIPPEDIMAGE= DE003722153A1
PUB-NO: DE003722153A1
DOCUMENT-IDENTIFIER: DE 3722153 A1
TITLE: Electrodynamic synchronous machine

PUBN-DATE: January 12, 1989

INVENTOR-INFORMATION:
NAME
COUNTRY
FRISTER, MANFRED DIPL ING DE
HAERER, HELMUT DR ING DE
HENNEBERGER, GERHARD DR ING DE
LUTZ, HANS-JOACHIM DIPL ING DE
OLBERTZ, HELMUT DR ING DE
RAGALY, ISTVAN DIPL ING DE
SCHMIDT, BURKHARDT DE
SCHUSTEK, SIEGFRIED DR ING DE

ASSIGNEE-INFORMATION:
NAME
COUNTRY
BOSCH GMBH ROBERT DE

APPL-NO: DE03722153
APPL-DATE: July 4, 1987

PRIORITY-DATA: DE03722153A (July 4, 1987)
INT-CL (IPC): H02K005/24; H02K019/22
EUR-CL (EPC): H02K001/24; H02K001/27
US-CL-CURRENT: 310/51

ABSTRACT:
In order to reduce interfering noise noticeably in the case of electrodynamic synchronous machines, the excitation poles are arranged offset from the magnetic centre within the pole pitches; both